

U.S. Department of Transportation

IAEA CERTIFICATE OF COMPETENT AUTHORITY SPECIAL FORM RADIOACTIVE MATERIALS

Pipeline and Hazardous Materials Safety Administration CERTIFICATE USA/0817/S-96, REVISION 3

This certifies that the source described has been demonstrated to meet the regulatory requirements for special form radioactive material as prescribed in the regulations of the International Atomic Energy Agency 1 and the United States of America 2 for the transport of radioactive material.

- 1. Source Identification ORNL Pu ZipCan.
- 2. Source Description An equilateral triangle shaped single encapsulation made of a titanium inner container and a stainless steel outer encapsulation that is tungsten inert gas seal welded. Approximate exterior dimensions are 57 mm (2.24 in.) on each edge and 11 mm (0.43 in.) thick. Construction shall be in accordance with attached ORNL Drawing No. SK-NMP-2015121-01, Rev. 0.
- 3. Radioactive Contents No more than 127 GBq (3.42 Ci) of Plutonium-238, 4.62 GBq (125 mCi) of Plutonium-239, 16.9 GBq (456 mCi) of Plutonium-240, 764 GBq (20.6 Ci) of Plutonium-241, 302 MBq (8.16 mCi) of Plutonium-242, and 13.5 kBq (364 nCi) of Plutonium-244. The Pu-238, Pu-239, Pu-240, Pu-241, Pu-242, and Pu-244 are in solid oxide form and are embedded in zirconium felt. The sum of the mass fractions must be no more than 2.01 grams.
- 4. Management System Activities Records of Management System activities required by Paragraph 306 of the IAEA regulations shall be maintained and made available to the authorized officials for at least three years after the last shipment authorized by this certificate. Consignors in the United States exporting shipments under this certificate shall satisfy the requirements of Subpart H of 10 CFR 71.

1 "Regulations for the Safe Transport of Radioactive Material, 2012 Edition,

No. SSR-6" published by the International Atomic Energy Agency (IAEA), Vienna, Austria.

² Title 49, Code of Federal Regulations, Parts 100-199, United States of America.

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5. Expiration Date - This certificate expires on March 31, 2027. Previous editions which have not reached their expiration date may continue to be used.

This certificate is issued in accordance with paragraph(s) 804 of the IAEA Regulations and Section 173.476 of Title 49 of the Code of Federal Regulations, in response to the February 3, 2022 petition by Department of Energy, Washington, DC, and in consideration of other information on file in this Office.

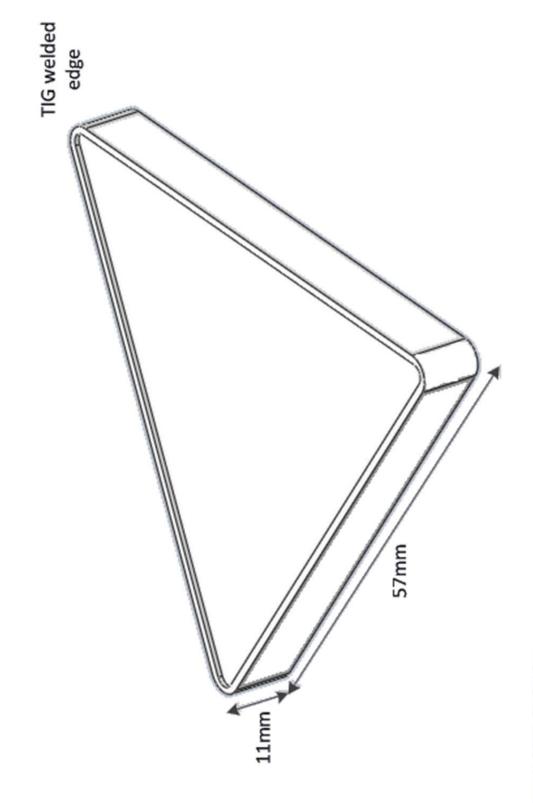
Certified By:

William Schoonover

William Schoonover Associate Administrator for Hazardous Materials Safety March 07, 2022 (DATE)

Revision 3 - Issued to extend the expiration date and modify the mass limits for Pu-238 and Pu-241 (no increase to overall Pu content).

ORNL Pu ZipCan Special Form Application and Test Summary Data Report Revision 1 DOE Docket #16-12-0000



Name: ORNL Pu ZipCan ORNL Drawing: SK-NMP-2015121-01, Rev. 0

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ORIGINAL REGISTRANT(S):

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